US 20210122223A1

(19) **United States**

(12) **Patent Application Publication** (10) **Pub. No.: US 2021/0122223 A1**

McCarron et al. (43) **Pub. Date: Apr. 29, 2021**

(54) **ELECTRIC VEHICLE PLATFORM**

(71) Applicant: **Canoo Inc.**, Torrance, CA (US)

(72) Inventors: **Daniel McCarron**, Torrance, CA (US); **Alexi Charbonneau**, Torrance, CA (US); **William Rohr**, Torrance, CA (US); **Charles Garmel**, Torrance, CA (US); **Felix Haeusler**, Torrance, CA (US); **Nathaniel Rosso**, Torrance, CA (US); **John Mason**, Torrance, CA (US); **Mayurkumar Agrawal**, Torrance, CA (US); **Phillip Weicker**, Torrance, CA (US); **Sohel Merchant**, Torrance, CA (US); **Naesung Lyu**, Torrance, CA (US); **Michael Ang**, Torrance, CA (US); **Jeffrey Walsh**, Torrance, CA (US)

(73) Assignee: **Canoo Inc.**, Torrance, CA (US)

(21) Appl. No.: **17/142,889**

(22) Filed: **Jan. 6, 2021**

Related U.S. Application Data

(63) Continuation of application No. 16/879,235, filed on May 20, 2020.

(60) Provisional application No. 62/903,709, filed on Sep. 20, 2019, provisional application No. 62/897,970, filed on Sep. 9, 2019, provisional application No. 62/869,823, filed on Jul. 2, 2019, provisional application No. 62/850,437, filed on May 20, 2019.

Publication Classification

(51) **Int. Cl.**

B60K 1/04	(2006.01)
B62D 21/11	(2006.01)
B60G 11/08	(2006.01)
B62D 21/15	(2006.01)
B60K 17/06	(2006.01)

(52) **U.S. Cl.**

CPC ***B60K 1/04*** (2013.01); ***B62D 21/11*** (2013.01); *B60K 2001/008* (2013.01); ***B62D 21/152*** (2013.01); ***B60K 17/06*** (2013.01); ***B60G 11/08*** (2013.01)

(57) **ABSTRACT**

Vehicle platforms, and systems, subsystems, and components thereof are described. A self-contained vehicle platform or chassis incorporating substantially all of the functional systems, subsystems and components (e.g., mechanical, electrical, structural, etc.) necessary for an operative vehicle. Functional components may include at least energy storage/conversion, propulsion, suspension and wheels, steering, crash protection, and braking systems. Functional components are standardized such that vehicle platforms may be interconnected with a variety of vehicle body designs (also referred to in the art as "top hats") with minimal or no modification to the functional linkages (e.g., mechanical, structural, electrical, etc.) therebetween. Configurations of functional components are incorporated within the vehicle platform such that there is minimal or no physical overlap between the functional components and the area defined by the vehicle body. Specific functional components of such vehicle platforms, and the relative placement of the various functional components, to allow for implementation of a self-contained vehicle platform are also provided.